

MISSOURI PUBLIC FUND INVESTMENT GUIDE

Investing Public Portfolios
Responsibly While Minimizing Risk



SCOTT FITZPATRICK
MISSOURI STATE TREASURER

Missouri Public Fund Investment Guide

1. **Public Trust**
2. **Public Funds Mandates**
 - a. Safety
 - b. Liquidity
 - c. Return
3. **Legality of Investments**
 - a. Constitutional
 - b. Statutory
4. **Establishing an Investment Policy**
5. **Allowable Investments**
 - a. Bank Deposits
 - b. Treasuries
 - c. Agencies
 - d. Repurchase Agreements
 - e. Commercial Paper/Bankers Acceptances
 - f. Unauthorized Investments
6. **Collateral for Public Funds**
 - a. Deposits
 - b. Repurchase Agreements
7. **Understanding Risk**
 - a. Duration
 - b. Credit
 - c. Other
8. **Understanding Your Mandate**
9. **Asset Allocation**
10. **Investment Selection**
11. **Broker/Dealer Selection**
12. **Staying the Course vs. Making Adjustments**
13. **Keeping Informed**

Appendix – State Treasurer Policies



SCOTT FITZPATRICK

MISSOURI STATE TREASURER

Dear Public Fund Investment Officers,



One of the most important roles performed by public servants is the responsible safeguarding and investing of public funds. It is imperative that state and local governments carry out this responsibility with the highest level of expertise and integrity. Public entities cannot function properly without the trust of the people they serve.

This booklet will provide a basic guide for conducting your investment duties in a safe and beneficial way for your communities. It will discuss recommended investment practices, outline different investment options that may be available to you as permitted by Missouri law, and supply you with information that will help you invest the public portfolio responsibly while minimizing risk.

Thank you for the work you do on behalf of Missouri. It is my hope that this guide will assist you in carrying out your duties with the level of skill and integrity worthy of public office.

Sincerely,

A handwritten signature in black ink that reads "Scott Fitzpatrick". The signature is written in a cursive style with a large initial "S".

Scott Fitzpatrick
Missouri State Treasurer

The Public Trust

Whether you are the designated **Chief Investment Officer** for your political subdivision or other staff responsible for investing, you have been entrusted with the care of public funds. No matter your title, management of public funds is a special privilege and responsibility. It is essential for you to maintain the public's trust in everything you do. There are some fundamental principles that must be followed to ensure the public trust is preserved.

First and foremost, when investing public funds, you are accepting an important responsibility — the care of funds which ultimately belong to the citizens of your political subdivision. It is essential that you fully understand the types of investment products you are using and the level of risk involved with them, at all times. You must also fully understand the laws that govern your investment activities. If you do not currently possess the requisite knowledge to make informed decisions, it would be in the best interests of your organization to contract with a financial advisor experienced in institutional investing of public funds.

First and foremost, when investing public funds, you are accepting an important responsibility -- the care of funds which ultimately belong to the citizens of your political subdivision.

In addition, you owe it to the public to stay apprised of current economic and market conditions that have an impact on investment decisions. There are numerous free or inexpensive resources you can use to stay up-to-date on these issues including broker research, financial websites, and print publications. You should also participate in regular training and/or certification classes to expand your knowledge. Continuing Education is an important part of your job and time should be allotted for it whenever feasible. In today's cost-conscious governmental environment it may not always be possible to travel to conferences or conventions, but there are many organizations around the state which offer training on a regular basis and you should take advantage of those opportunities whenever possible.

You should also take the time to document the policies and procedures applicable to the functions of your office and routinely document your day-to-day actions with the purpose of ensuring that they comply with your stated policies and procedures. For example, even something as routine as buying a treasury bond should be well documented to show that the purchase was appropriate (i.e. it was competitively bid to assure best pricing).

Care should be taken at all times to act in a manner consistent with the public good.

Finally, care should be taken at all times to act in a manner consistent with the public good. Even the appearance of impropriety, nepotism, or favoritism should be avoided. While a course of action may not seem like a conflict of interest to you, you should always consider how it would appear through the eyes of the members of the public that you serve.

Public Funds Mandates

Public funds are those funds used for operations of the specific governing body you serve. In general, they include taxes, fees, and other revenue generated from the public for use by the political subdivision in carrying out its duties. They are not generally inclusive of endowment or pension funds, which serve a different purpose. In addition to legality (discussed later in this guide), there are three important principles, discussed below, to guide you in the investment of public funds: **safety, liquidity, and return.**

Safety

The preservation of the principal of public funds is the primary concern of your office. You have been entrusted with these funds to protect them for their intended use. While Missouri law provides relatively safe alternatives for public fund investments, care should still be taken to ensure that appropriate structures and maturities are used to preserve principal. Each investment that you choose should leave you with no concerns as to the safety of the funds invested.

Liquidity

After safety of principal, liquidity of assets is the next most important principle for your consideration. Funds must be invested in a manner that will provide adequate liquidity to meet current and future obligations. Failure to adequately plan for these needs could require you to sell an investment at a loss in order to generate cash (thus violating the first mandate – safety of principal). Liquidity needs are extremely important when considering an investment and should never be overlooked for the sake of return.

Return

Return, while important, is the least critical objective of the three. Return is nothing more than compensation for a specific level of risk, thus higher returns necessarily equate to higher risks. Risk, as will be discussed later, comes in many forms and is not solely limited to the risk of default. It is understandable in lean financial times that there may be pressure on the investment officer to produce larger returns to supplement a sometimes meager budget. However, it is important to resist the temptation to forsake safety and liquidity in order to generate more returns.

Resist the temptation to forsake safety and liquidity in order to generate more returns.

Legality of Investments

As previously stated, it is very important for you to fully understand the laws that govern permissible investments for your political subdivision. Not all public entities are subject to the same laws regarding permissible investments. Both Missouri constitutional and statutory provisions may be relevant to your particular situation. In addition, cities and counties may have ordinances which could be instructive regarding the types of investments that have been deemed permissible.

A political subdivision may invest more stringently than the law allows, but not less.

The following information is intended as a general guide only. **If you have any questions or concerns about the legality of any investment, you are urged to contact legal counsel for your organization and seek his or her opinion.**

Missouri Constitution

Article IV, Section 15 of the Missouri Constitution¹ sets forth the investments that the State Treasurer may use when investing state funds. While this applies specifically to the powers and duties of the State Treasurer, some political subdivisions' investment authority mirrors that of the State Treasurer.

In addition, Article VI, Section 23 of the Missouri Constitution prohibits political subdivisions from owning corporate stock and Section 25 of the same Article prohibits the lending of money or granting of credit to aid any corporation, association, or individual, subject to certain exceptions.

Missouri Statutes

Unfortunately, there is no single statute that governs investment authority for political subdivisions. While there are a few statutes that cover all entities, many political subdivisions have their own set of statutes which guide their activities. It is beyond the scope of this guide to set forth each and every statute which may apply to your organization, however, a partial list is provided below.

Statutory Reference: ²

Mo. Rev. Stat. § 95.530

Mo. Rev. Stat. § 110.270

Mo. Rev. Stat. § 165.051

Mo. Rev. Stat. § 67.085

Subject:

City of St. Louis

Counties

School Districts

Investment of Certain Public Funds

¹ The Missouri Constitution can be found online at moga.mo.gov/mostatutes/moconstn.html

² Missouri Revised Statutes can be found online at moga.mo.gov/mostatutes/statutesAna.html

In addition to statutory references to particular types of political subdivisions, all such organizations should be familiar with the laws governing depositories of public funds (*Mo. Rev. Stat. Chapter 110*) and collateralization of public funds (*Mo. Rev. Stat. Chapter 110 and Chapter 30*).

Case law and Attorney General Opinions

A limited amount of case law in Missouri interprets the above-referenced constitutional and statutory provisions related to permissible investments; however, if a question were to arise case law may be helpful. Additionally, the Missouri Attorney General has had occasion over the years to answer questions related to the legality of certain investments and those opinions may be instructive to your organization.³

Establishing an Investment Policy

Missouri law requires all political subdivisions with authority to invest funds in a manner other than in depository accounts to adopt and comply with a formal written investment policy (see *Mo. Rev. Stat. § 30.950*). This statute also requires the State Treasurer to provide a model investment policy for use as a guide. The current version of the State Treasurer's Model Investment Policy is attached in the appendix and it may also be found at treasurer.mo.gov. Any political subdivision that does not adopt a formal investment policy is restricted to legal investment authority granted prior to January 1, 1997.

Any political subdivision that does not adopt formal investment policies is restricted to legal investment authority granted prior to Jan. 1, 1997.

³ Missouri Attorney General opinions can be found on-line on the website of the Missouri Attorney General at ago.mo.gov/other-resources/ag-opinions

While the State Treasurer provides a model policy to be used as a guide, it does not mean that a particular political subdivision can or should invest in all of the allowable investments within the model policy. Before adopting any portion of the model policy, you must ensure that it is appropriate for your organization. The investment policy for your particular entity should at all times be tailored to meet the needs of your individual situation. For example, a lack of experience and expertise within your office would be an indication of a need for a more basic policy, rather than one that involves more sophisticated options, such as commercial paper and repurchase agreements.

Your investment policy must address at least the components required by *Section 30.950*, including:

- The commitment to safety, liquidity, and return (in that order);
- The prohibition of derivatives, speculation, and leverage;
- The periodic “mark to market” pricing/valuation;
- A requirement that investments which fall below acceptable rating levels be reviewed for possible sale within a reasonable period of time;

- Regular periodic reporting of results to the governing body.

It is recommended that your policy also include the following:

- A statement of purpose;
- Duties, responsibilities, and procedures;
- Investment objectives, constraints, and guidelines;
- Acceptable and prohibited investments;
- Collateralization policies;
- Procedures for evaluation and review; and
- An asset allocation policy.

Your investment policy should not be a static document; once passed, it should be reviewed regularly. Changes in financial condition, staff expertise, and the law could all be reasons for an amendment or adjustment to the policy. An investment policy should also be individualized to the governing body’s willingness and ability to take risks. For example, some boards are not willing to accept any risk of principal on public funds and therefore only U.S. Government guaranteed investments will be appropriate. Ultimately, the

Your investment policy should not be a static document, review it regularly.

development of the policy is the duty of the local governing body and it is your responsibility as the investment officer to make sure the office is in compliance with policy at all times.

In addition to the investment policy, it is recommended that you develop and utilize a detailed policies and procedures manual outlining the operations of the investment staff and review it periodically to ensure accuracy. While not an exhaustive list, some items to include in this document are policies and procedures related to the identification of authorized traders, an asset allocation policy (if not contained in your investment policy), trade processes, bid processes, acceptable collateral, pricing sources, and staff responsibilities for daily tasks.

Allowable Investments

Following is a description of the investments the Missouri Constitution allows the State Treasurer to use. As mentioned above in section 3, this does not automatically mean that your political subdivision may invest in each of these types of investments. Individual determinations must be made based upon the law that is applicable to your entity. If you have questions about the law that applies, you are encouraged to seek a legal opinion that specifically addresses your political subdivision.

Bank Deposits

In general, Missouri law allows two types of bank accounts: time deposits (certificates of deposits or saving accounts, including certain types of money market deposit accounts) and demand deposits (checking accounts). Time deposits must bear interest and are limited to five years in length from the time of placement. It is the opinion of the State Treasurer's office that accounts which do not fall into one of these categories, such as insured money market funds or mutual funds, are not authorized by Missouri law.

Missouri law allows two types of bank accounts: time deposits and demand deposits.

Bank deposits are generally required to be held in “banking institutions in this state” which means that a bank must have a physical location or ability to accept a deposit within Missouri. Additionally, some political subdivisions are required to use depositories located within their jurisdictions or adjacent jurisdictions if a local bank is not available for deposits.

All deposits in excess of FDIC insurance must be collateralized as described in Chapter 110 of the Missouri Statutes. You should have a written contract with each bank in which you place deposits. The Government Finance Officers Association (GFOA) has authored a helpful Best Practice Guide on Collateralizing Public Deposits, which you can find on the GFOA website, gfoa.org. You should also develop policies which guide you in the selection of banks for deposit, considering not only the bank’s location but also its financial rating and its equity capital.

Brokered/negotiable CD’s of financial institutions are also acceptable. Missouri law authorizes political subdivision participation in a program like CDARS (see Mo. Rev. Stat. §67.085). However, it is important to note that all four qualifications mentioned in Section 67.085 must be met in order for the investment to be proper.

The primary risks associated with depository accounts are those related to bank failures. As such, it is imperative that the political subdivision take steps to assure the sufficiency of its collateral, such as regular market pricing, and ensure that it has a perfected security interest in all collateral pledged.

Treasuries

Many securities issued by the United States Treasury are legal investments. The most important aspect of a treasury is the maturity. The maximum maturity of any investment in treasuries is limited to five years from the day of purchase/settlement (three years for those political subdivisions who have failed to develop an investment policy as required by Mo. Rev. Stat. Section 30.950).

While bonds issued by the Treasury have historically been viewed as being without risk, government default questions have been brought to the forefront in recent years as a result of issues related to the funding of the federal government.

Agencies

Agency securities are authorized in the Missouri Constitution by the phrase “obligations of the United States Government or any agency or instrumentality thereof.” These are also limited to five years in maturity. Some of the more common agency securities are issued by Federal National Mortgage Association (FNMA or Fannie Mae), Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), Federal Farm Credit Bank (FFCB), and Federal Home Loan Bank (FHLB).

There is some risk associated with this type of investment although most industry participants view that risk as somewhat mitigated by either a full faith and credit guarantee from the U.S. Government or a “moral obligation” of the government.

Repurchase Agreements

Repurchase Agreements and Reverse Repurchase Agreements are also authorized investments for the State Treasurer under the Missouri Constitution. They are limited to 90 days in maturity and must be collateralized by U.S. treasuries or agencies. You should have in place a Master Repurchase Agreement (MRA) with each counterparty detailing the operational aspects of the relationship.

You should have in place a Master Repurchase Agreement with each counterparty detailing the operational aspects of the relationship.

Since most of the risk of the repurchase transaction rests with the counterparty’s performance, care should be taken to exercise due diligence in the selection of your repurchase agreement counterparties.

Commercial Paper/Bankers' Acceptances

Commercial Paper and Bankers' Acceptances are two additional investments that have been authorized for use by the State Treasurer by the Missouri Constitution. The maximum allowable maturity is 180 days and the investment must maintain the highest available credit rating for the duration of its life. Only domestic Commercial Paper and Bankers' Acceptances from domestic commercial banks are allowed.

Unlike many other available investments, these options do involve corporate credit risk. An appropriate credit monitoring process and due diligence process should be in place prior to actively pursuing these types of investments. If your investment staff does not have credit analysis skills, these investments should be avoided.

Unauthorized Investments

As mentioned previously, if an investment is not expressly authorized by Missouri law, a political subdivision should not invest in it. For example, it is the opinion of the State Treasurer's office that mutual funds are not authorized. It does not matter that a mutual fund only invests in legal securities as defined by the Missouri Constitution when the funds themselves have no maturity and no law authorizing their use. Attorney General Opinion 64-95 addresses this very issue with regard to school districts, but the reasoning could apply to other political subdivisions.

Political subdivisions are also prohibited from investing in certain derivatives, as defined by Mo. Rev. Stat. Section 30.950. Other investments specifically prohibited by the Constitution are equity securities and corporate debt.

Collateral for Public Funds

Public funds on deposit at financial institutions in excess of FDIC coverage and amounts invested in repurchase agreements must be fully collateralized with acceptable collateral. The acceptable collateral lists are not identical.

Public funds on deposit at financial institutions must be insured by the FDIC, and those amounts on deposit in excess of that insurance must be fully collateralized with acceptable collateral. Repurchase agreements must also be fully collateralized with acceptable collateral. The acceptable collateral lists are not identical.

When accepting securities as collateral, the maturities and security types should be given careful

consideration. Keep in mind, the longer the duration of the security, the more interest rate risk is associated with it. With longer duration collateral, there is a need for more frequent and regular pricing to ensure you remain fully collateralized. You should also consider a “haircut” on collateral pricing when accepting it. If you collateralize at 102% of market value, you are building in a 2% price swing in the cost of collateral to help protect yourself from market movement. A good minimum starting point for collateral haircuts is 102, with 105 being more appropriate for securities with more volatile market values such as mortgage-backed and thinly-traded municipals.

Pledged collateral should be held by an independent third party institution with which the political subdivision has a written agreement. You should develop policies which guide you in the selection of custodians for collateral, like those used for the selection of depository banks, including the entity’s financial rating and equity capital.

Deposits

Bank deposits are required to be collateralized for any funds on deposit in excess of the maximum amount of FDIC insurance, which is currently \$250,000. Section 30.270 of the Missouri Revised Statutes outlines the various types of legally acceptable collateral. However, it is up to each entity to determine what type of collateral you will accept within the confines of this list.

Since this collateral will need to be sold in the event of a default, you should be comfortable with the securities being pledged and how to liquidate them should the need arise.

Pricing of collateral is also important and you should feel comfortable that your pricing source is accurate when seeking market prices for your collateral portfolio. Daily re-pricing for an active collateral portfolio, such as that held by the State Treasurer, is a necessity if you are to maintain your collateral positions at the appropriate levels to assure you remain adequately collateralized at all times.

Repurchase Agreements

Article IV, Section 15 of the Missouri Constitution limits the type of securities that are acceptable as collateral for Repurchase Agreements. The only securities acceptable are those issued by the U.S. government agencies or instrumentalities, or those issued by the Treasury. The securities listed in Section 30.270 are not applicable to repurchase agreements.

Understanding Risk

Although most people think of risk in a very singular manner – the risk of default – it actually comes in many forms. While default (credit) risk is an important consideration with regard to any investment, there are a number of other risks to consider as well. The following is a brief summary of the types of risk you should consider and analyze with respect to any purchased investment.

Most people think of risk in a very singular manner - the risk of default - it actually comes in many forms.

Default or Credit

While default or credit risk is generally the easiest risk to understand, it is no longer an easy risk to measure. Gone are the days of blindly following a rating agency's published "letter grade" for default risk of a borrower. There is so much to consider when looking at a potential credit issue that merely looking at a minimum credit standard may not suffice. This is

not to say that rating agencies do not serve a valuable purpose in providing very useful information, but it is important to point out that you may want to do some additional research into the potential credit risk before making a buy decision.

Duration (interest rate risk)

Duration is a common measure of interest rate risk in fixed income portfolios and is probably the single most important concept in fixed income management. **Duration is a measure of the price sensitivity of a bond to changes in interest rates.** Though duration is not an exact measure but merely an approximation, it is important to understand what it means.

Duration can most easily be explained as this: it is the approximate percentage price change in the value of a bond, given a 100 basis point change in the level of interest rates. For instance, if the yield curve experiences a 100 basis point parallel shift (meaning all rates throughout the curve experience the same 100 basis point shift), a bond with duration of five will experience a 5% price change, inversely related to the direction of the rate move.

Liquidity

Liquidity risk is very important when looking at securities being pledged as collateral. If there is no liquid market, getting an accurate and fair pricing quote for the security will be difficult because there is no active market for the broker to take the bond for resale.

Also, liquidity risk is an important consideration for the portfolio as a whole. Careful planning is required to ensure sufficient liquidity to meet cash outflows. One common area of misjudgment is buying callable bonds with the thought they will definitely be called prior to your cash needs. This is a dangerous game as was demonstrated during the “taper tantrum” of the spring of 2013. Many political subdivisions were left holding bonds which were not called and cash flow problems occurred. If a callable bond is purchased you should be prepared to hold it to maturity.

Other

While credit, interest rate, and liquidity risks are at the forefront of consideration, there are many other risk considerations in today's investment world. Things like counterparty risk in a repurchase transaction or headline risk (political risk) of depositing money in a financially weak bank should also be considerations. As a public entity, you may even face risk from a single large employer in town closing, in turn creating financial hardship and unemployment in the area which could affect tax collections for some time to come. **All of these risks need to be considered when managing the money entrusted to you.**

Understanding Your Mandate

All investment officers share certain mandates like the safety, liquidity, and return on investments, but there are likely differences in how you should manage the investment function, given the governing body's needs and wishes. For example, some budgets will require the portfolio to generate enough excess return to pay for certain services while others may want a minimum daily liquidity number met.

All of these mandates should be spelled out in the investment policy but it is your job to ensure your staff understands and abides by these mandates. These are the overriding guidelines by which you make your decisions on a daily basis and thoughtful consideration must be given to anything that might even slightly conflict with one of your mandates.

Asset Allocation

Although public fund managers are limited in what they can buy, diversification through an effective asset allocation policy is still important. An asset allocation policy should be established and must be a living document, subject to change when market and individual

Diversification through an effective asset allocation policy is important.

conditions dictate that change necessary or advisable. A broadly diversified portfolio in name and structure, as well as security type will benefit your political subdivision in the long run and perform better during times of sector turmoil in the market.

A portfolio consisting only of time deposits or treasury bonds will lag in performance when compared to a more diversified holding. For instance, an easy option for yield enhancement in a public fund portfolio is holding a certain percentage of callable agency debt in addition to the traditional bullet offerings from the same agencies and the U.S. Treasury. A call option can be worth anywhere from 10 to 40 basis points in additional yield over a standard bullet.

A benefit of holding multiple agency names is the changing desire for funding. At certain times, the Federal National Mortgage Association (FNMA or Fannie Mae) for instance, may not need as much funding as the Federal Home Loan Bank (FHLB). In that instance, the ability to hold FHLB will allow you to possibly pick up yield over the FNMA offerings since FHLB will have a greater desire for the funding and a consequent willingness to pay you more in interest. Without name diversification, you will not be able to take advantage of this type of situation.

Investment Selection

Always make your own determination as to the appropriateness of a particular investment based on all facts and circumstances.

When making purchasing decisions, never rely solely on the judgment of someone who is trying to sell you a particular security. You should always make your own determination as to the appropriateness of a particular investment based on all facts and circumstances. When purchasing an investment, you should always look

at its legality, structure, issuer, liquidity, maturity, and credit rating. Care should be taken to only purchase appropriate investments for your particular situation. Although this may seem to be obvious, there are numerous examples of investment professionals buying inappropriate investments for their particular needs. One example of this is purchasing

callable bonds with the hope that they will be called in time for your liquidity needs. If interest rates move or the issuer decides not to call the bonds, the investment will need to be sold and, more often than not, the investor will realize a loss of principal.

Whether a particular investment is appropriate also depends upon the experience, skill and knowledge level of investment staff. If staff does not fully understand a particular investment or cannot adequately analyze its risk, that investment, even though allowable, should be avoided in favor of a more basic option.

Broker/Dealer and Counterparty Selection

Selecting the broker/dealers with whom you transact business is an important consideration. It is recommended that you maintain a list of approved broker/dealers and regularly review and update it. On occasion, it is good practice to send out a Request for Qualifications or a Request for Information for brokerage services. You should develop a list of brokers or

You should develop a list of brokers or firms that you trust and that will take the time to understand your investments needs and limitations.

firms that you trust and that will take the time to understand your investments needs and limitations, in addition to offering you competitive pricing.

A well-maintained broker/dealer list provides you with several very important things. First, a robust list assures competition in offerings.

Putting brokers in competition to win a sale should allow you to get a highly competitive price on the security in question. A well maintained list will also allow you to see more investment opportunities and make better informed decisions.

Additionally, broker/dealers can provide valuable economic and market insight. You should ask to be placed on any mailing lists or emails of market and economic research they provide. This is a free service to customers and should be expected from your participating counterparties.

A political subdivision that invests in commercial paper or participates in the repurchase market should also have an established policy for selection of those counterparties.

In addition to creating these approved lists, you should develop procedures to monitor the broker/dealers and other counterparties on your lists. Information such as credit ratings, the competitiveness of pricing, management and reputation should be monitored on a regular basis. You should also develop policies and procedures outlining the basis and steps for removal of any approved counterparty from the approved list.

Staying the Course vs. Making Adjustments

Once you have a strategy in place and are invested accordingly, it is important to give it time to work as intended. Do not fall into the trap of allowing a trend to cause you to shift your focus and rethink your strategies. If you believe that in the long run interest rates will rise, you should manage your portfolio with that in mind, despite any short-term rate fluctuations. This is not to say that if market conditions dictate, you should not take action. But true market directional changes or changes in future market expectations are very different from the occasional market upheaval and interest rate correction.

Once you have a strategy in place and are invested accordingly, it is important to give it time to work as intended.

Federal Reserve monitoring has become common, and thus when the Chairman makes any statement, it can cause the market to shift focus. As the fund manager for your political subdivision, you must be nimble enough to react to real changes in market expectations which might cause your current investment strategy to underperform. You must be able to stay focused on your long term goals and act accordingly, not waver in the face of short term or superficial changes. True economic changes or expectations are the real drivers of the change you will need to make in your portfolio.

Keeping informed

Information is the driving force of the markets. Keeping well informed is an integral part of your job and should be high on your list of priorities. It is not uncommon for portfolio managers to spend more time consuming information than buying or selling investments. There are thousands of sources for this information and many of them are free. From broker-generated research to websites specializing in different areas of the market, you are highly encouraged to spend time seeking out these sources and then regularly using them to stay informed.

Keeping well informed should be high on your list of priorities.

Appendix

1. Model Investment Policy
2. Acceptable Collateral Policy



SCOTT FITZPATRICK
MISSOURI STATE TREASURER

MODEL INVESTMENT POLICY

I. Scope

This policy applies to the investment of all operating funds of the [entity]. Longer-term funds, including investments of employees' retirement funds and proceeds from certain bond issues, are covered by a separate policy.

Pooling of Funds

Except for cash in certain restricted and special funds, the [entity] will consolidate cash balances from all funds to maximize investment earnings. Investment income will be allocated to the various funds based on their respective participation and in accordance with generally accepted accounting principles.

External Management of Funds

Investment through external programs, facilities and professionals operating in a manner consistent with this policy will constitute compliance.

II. General Objectives

The primary objectives, in priority order, of investment activities shall be safety, liquidity, and yield:

1. Safety

Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate credit risk and interest rate risk.

a. Credit Risk

The [entity] will minimize credit risk, the risk of loss due to the failure of the security issuer or backer, by:

- Pre-qualifying the financial institutions, broker/dealers, intermediaries, and advisors with which the [entity] will do business.
- Diversifying the portfolio so that potential losses on individual securities will be minimized.

b. Interest Rate Risk

The [entity] will minimize the risk that the market value of securities in the portfolio will fall due to changes in general interest rates, by:

- Structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations, thereby avoiding the need to sell securities on the open market prior to maturity.
- Investing operating funds primarily in shorter-term securities.

2. Liquidity

The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This is accomplished by structuring the portfolio so that securities mature concurrent with cash needs to meet anticipated demands (static liquidity). Furthermore, since all possible cash demands cannot be anticipated, the portfolio should consist largely of securities with active secondary or resale markets (dynamic liquidity). A portion of the portfolio also may be placed in bank deposits or repurchase agreements that offer same-day liquidity for short-term funds.

3. Yield

The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary importance compared to the safety and liquidity objectives described above. The core of investments is limited to relatively low risk securities in anticipation of earning a fair return

relative to the risk being assumed. Securities shall not be sold prior to maturity with the following exceptions:

- A security with declining credit may be sold early to minimize loss of principal.
- A security swap would improve the quality, yield, or target duration in the portfolio.
- Liquidity needs of the portfolio require that the security be sold.

III. Standards of Care

1. Prudence

All participants in the investment process shall act responsibly as custodians of the public trust. The standard of prudence to be applied by the personnel of the Investment Division is the “prudent investor” rule, which states, “Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.”

2. Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Employees and investment officials shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking personal investment transactions with the same individual with which business is conducted on behalf of the [entity].

3. Delegation of Authority

Authority to manage the investment program is granted to [designated official or external professional, hereinafter referred to as investment officer] and derived from the following [insert code citation, ordinances, charters, statutes or constitution]. Responsibility for the operation of the investment program is hereby delegated to the investment officer, who shall act in accordance with the established written procedures and internal controls for the operation of the investment program consistent with this investment policy. Procedures should include references to safekeeping, delivery vs. payment, investment accounting, repurchase agreements, wire transfer agreements, and collateral/ depository agreements. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the investment officer. The investment officer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials.

IV. Investment Transactions

1. Authorized Financial Dealers and Institutions

A list will be maintained of financial institutions authorized to provide investment transactions. In addition, a list will also be maintained of approved security broker/dealers selected by creditworthiness as determined by the investment officer and approved by the governing body. These may include “primary” dealers or regional dealers that qualify under Securities and Exchange Commission (SEC) Rule 15C3-1 (uniform net capital rule).

All financial institutions and broker/dealers who desire to become qualified for investment transactions must supply the following as appropriate:

- Audited financial statements.
- Proof of National Association of Securities Dealers (NASD) certification.
- Proof of state registration.
- Completed broker/dealer questionnaire.
- Certification of having read and understood and agreeing

to comply with the [entity's] investment policy.

An annual review of the financial condition and registration of qualified financial institutions and broker/dealers will be conducted by the investment officer.

2. Internal Controls

The investment officer/internal auditor/director of accounting is responsible for establishing and maintaining an internal control structure that will be reviewed annually with the [entity's] independent auditor. The internal control structure shall be designed to ensure that the assets of the [entity] are protected from loss, theft, or misuse and to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of control should not exceed the benefits likely to be derived and (2) the valuation of costs and benefits require estimates and judgments by management.

The internal controls shall address the following points:

- Control of collusion.
- Separation of transaction authority from accounting and record keeping.
- Custodial safekeeping.
- Avoidance of physical delivery securities.
- Clear delegation of authority to subordinate staff members.
- Written confirmation of transactions for investments and wire transfers.
- Development of a wire transfer agreement with the lead bank and third party custodian.

3. Delivery vs. Payment

All trades where applicable will be executed by delivery vs. payment (DVP) to ensure that securities are deposited in eligible financial institutions prior to the release of funds. All securities shall be perfected in the name or for the account of the [entity]

and shall be held by a third-party custodian as evidenced by safekeeping receipts.

V. Suitable and Authorized Investments

1. Investment Types

In accordance with and subject to restrictions imposed by current statutes, the following list represents the entire range of investments that [entity] will consider and which shall be authorized for the investments of funds by the [entity].

A. Governmental and Agency Debt – those securities issued by and or guaranteed by the Federal Government or an Agency or Instrumentality of the Federal Government:

I. United States Treasury Securities. The [entity] may invest in obligations of the United States government for which the full faith and credit of the United States are pledged for the payment of principal and interest.

II. United States Agency Securities. The [entity] may invest in obligations issued or guaranteed by any agency of the United States Government as described in V.(2).

B. Fixed Income investments secured by FDIC insurance and/or Collateral:

I. Repurchase Agreements. The [entity] may invest in contractual agreements between the [entity] and commercial banks or primary government securities dealers. The purchaser in a repurchase agreement (repo) enters into a contractual agreement to purchase U.S. Treasury and government agency securities while simultaneously agreeing to resell the securities at predetermined dates and prices.

II. Collateralized Public Deposits (Certificates of Deposit). Instruments issued by financial institutions which state that specified sums have been deposited for specified periods of time and at specified rates of interest. The certificates of deposit are required to be backed by acceptable collateral securities as dictated by

State statute.

C. Other Fixed Income Debt issued by Commercial Enterprises: It should be noted that investments in the following instruments require an additional level of care and prudence when undertaken by the investment officer. Because these investments are in commercial credits as opposed to governmental credit, or subject to the added safety of collateral, the risk of loss of principal is significantly higher for the following investments than in the four prior categories. Added financial training and education is recommended for the Investment Officer wishing to participate in and/or manage a commercial paper program. Outside professional management of your commercial paper program is highly recommended.

I. Bankers Acceptances. The entity may invest in bills of exchange or time drafts on and accepted by a commercial bank, otherwise known as bankers' acceptances. An issuing bank must have received the highest letter and numeral ranking (i.e., A1 / P1) by at least two nationally recognized statistical rating organizations (NRSRO's). Bankers Acceptances must be issued by domestic commercial banks. Purchases of bankers' acceptances may not exceed 180 days to maturity. No more than 5% of the total market value of the portfolio may be invested in the bankers' acceptances of any one issuer and no more than 25% of the entire portfolio may be invested in banker's acceptances.

II. Commercial Paper. The entity may invest in commercial paper which has received the highest letter and numeral ranking (i.e., A1 / P1) by at least two nationally recognized statistical rating organizations (NRSRO's). Eligible paper is further limited to issuing corporations that have a total commercial paper program size in excess of \$250,000,000 and have long term debt ratings, if any, of "A" or better from at least one NRSRO. Purchases of commercial paper may not exceed 180 days to maturity. Approved commercial paper programs should provide some diversification by industry.

Additionally, purchases of commercial paper in industry sectors that may from time to time be subject to undue risk and potential illiquidity should be avoided. The only asset-backed commercial paper programs that are eligible for purchase are fully supported programs that provide adequate diversification by asset type (trade receivables, credit card receivables, auto loans, etc.) No securities arbitrage programs or commercial paper issued by Structured Investment Vehicles (SIV's) shall be considered. No more than 5% of the total market value of the portfolio may be invested in the commercial paper of any one issuer. No more than 25% of the entire investment portfolio may be invested in Commercial Paper. Commercial paper issuers must be subject to weekly credit review and daily news research and analysis and a monitoring program must be established to promulgate best practices credit monitoring.

2. Security Selection

The following list represents the entire range of United States Agency Securities that the [entity] will consider and which shall be authorized for the investment of funds by the [entity]. Additionally, the following definitions and guidelines should be used in purchasing the instruments:

- U.S. Govt. Agency Coupon and Zero Coupon Securities. Bullet coupon bonds with no embedded options.
- U.S. Govt. Agency Discount Notes. Purchased at a discount with maximum maturities of one (1) year.
- U.S. Govt. Agency Callable Securities. Restricted to securities callable at par only with final maturities of five (5) years.
- U.S. Govt. Agency Step-Up Securities. The coupon rate is fixed for an initial term. At coupon date, the coupon rate rises to a new, higher fixed term. Restricted to securities with final maturities of five (5) years.

3. Investment Restrictions and Prohibited Transactions To provide for the safety and liquidity of the [entity's] funds, the investment portfolio will be subject to the following restrictions:

- Borrowing for investment purposes (“Leverage”) is prohibited.
- Instruments known as variable rate demand notes, floaters, inverse floaters, leveraged floaters, and equity- linked securities are not permitted. Investment in any instrument, which is commonly considered a “derivative” instrument (e.g. options, futures, swaps, caps, floors, and collars), is prohibited.
- Contracting to sell securities not yet acquired in order to purchase other securities for purposes of speculating on developments or trends in the market is prohibited.

4. Collateralization

Collateralization will be required on two types of investments: certificates of deposit and repurchase agreements. The market value (including accrued interest) of the collateral should be at least 100%.

For certificates of deposit, the market value of collateral must be at least 100% or greater of the amount of certificates of deposits plus demand deposits with the depository, less the amount, if any, which is insured by the Federal Deposit Insurance Corporation, or the National Credit Union Share Insurance Fund.

All securities, which serve as collateral against the deposits of a depository institution, must be safekept at a non-affiliated custodial facility. Depository institutions pledging collateral against deposits must, in conjunction with the custodial agent, furnish the necessary custodial receipts within five business days from the settlement date.

The [entity] shall have a depository contract and pledge agreement with each safekeeping bank that will comply with the Financial Institutions, Reform, Recovery, and Enforcement Act of 1989 (FIRREA). This will ensure that the [entity’s] security interest in collateral pledged to secure deposits is enforceable against the receiver of a failed financial institution.

5. Repurchase Agreements

These securities for which repurchase agreement will be transacted will be limited to U.S. Treasury and government agency securities that are eligible to be delivered via the Federal Reserve Fedwire book entry system. Securities will be delivered to the [entity's] designated Custodial Agent. Funds and securities will be transferred on a delivery vs. payment basis.

VI. Investment Parameters

1. Diversification

The investments shall be diversified to minimize the risk of loss resulting from over concentration of assets in specific maturity, specific issuer, or specific class of securities.

Diversification strategies shall be established and periodically reviewed. At a minimum, diversification standards by security type and issuer shall be:

- U.S. treasuries and securities having principal and/or interest guaranteed by the U.S. government: **100%**
- Collateralized time and demand deposits: **100%**
- U.S. Government agencies, and government sponsored enterprises: **No more than 60%**
- Collateralized repurchase agreements: **50%**
- U.S. Government agency callable securities: **No more than 30%**

2. Maximum Maturities

To the extent possible, the [entity] shall attempt to match its investments with anticipated cash flow requirements. Investments in repurchase agreements shall mature and become payable not more than ninety days (90) from the date of purchase. All other investments shall mature and become payable not more than five (5) years from the date of purchase. The [entity] shall adopt weighted average maturity limitations that should not exceed three (3) years and are consistent with the investment objectives.

Because of inherent difficulties in accurately forecasting cash flow requirements, a portion of the portfolio should be continuously invested in readily available funds such as in bank deposits or overnight repurchase agreements to ensure that appropriate liquidity is maintained to meet ongoing obligations.

VII. Reporting

1. Methods

The investment officer shall prepare an investment report at least quarterly, including a management summary that provides an analysis of the status of the current investment portfolio and transactions made over the last quarter. This management summary will be prepared in a manner that will allow the [entity] to ascertain whether investment activities during the reporting period have conformed to the investment policy. The report should be provided to the governing body of the [entity]. The report will include the following:

- Listing of individual securities held at the end of the reporting period.
- Realized and unrealized gains or losses resulting from appreciation or depreciation by listing the cost and market value of securities over one-year duration (in accordance with Government Accounting Standards Board (GASB) 31 requirements). [Note, this is only required annually]
- Average weighted yield to maturity of portfolio on investments as compared to applicable benchmarks.
- Listing of investment by maturity date.
- Percentage of the total portfolio which each type of investment represents.

2. Performance Standards

The investment portfolio will be managed in accordance with

the parameters specified within this policy. The portfolio should obtain a market average rate of return during a market/economic environment of stable interest rates. A series of appropriate benchmarks may be established against which portfolio performance shall be compared on a regular basis.

3. Marking to Market

The market value of the portfolio shall be calculated at least quarterly and a statement of the market value of the portfolio shall be issued at least annually to the governing body of the [entity]. This will ensure that review of the investment portfolio, in terms of value and price volatility, has been performed.

VIII. Policy Considerations

Exemption

Any investment currently held that does not meet the guidelines of this policy shall be exempt from the requirements of this policy. At maturity or liquidation, such monies shall be reinvested only as provided by this policy.

This policy shall be adopted by resolution of the [entity's] governing body. The policy shall be reviewed annually by the investment officer and recommended changes will be presented to the governing body for consideration.

IX. List of Attachments

The following documents, as applicable, are attached to this policy:

- Securities acceptable as collateral to secure deposits
- Listing of authorized personnel
- Relevant investment statutes and ordinances
- Repurchase agreements and tri-party agreements
- Listing of authorized broker/dealers and financial institutions
- Safekeeping agreements
- Wire transfer agreements
- Sample investment reports
- Glossary



SCOTT FITZPATRICK
MISSOURI STATE TREASURER

The securities described below are hereby designated as acceptable collateral for state funds on deposit, as required by Section 30.270 RSMo (as amended). ***The State Treasurer reserves the right to refuse to accept as collateral any security or securities on this list, or to request the submission of an alternate acceptable security or securities, if, in the sole discretion of the State Treasurer, the State Treasurer determines that such action will provide greater security for the deposit of state funds.***

The securities described below are designated as acceptable collateral for the deposit of state funds. The listing is not intended to serve as, and should not be considered as a listing of legally authorized investment instruments.

1. Marketable Treasury securities of the United States.
2. Bonds or certificates of participation (COP's) issued by the State of Missouri with an investment grade long-term rating from one of the Nationally Recognized Statistical Ratings Organizations (NRSRO's) or are secured by a federal agency guarantee (directly or through guaranteed loans), to include the following:
 - a. General obligation debt securities issued by the State of Missouri.
 - b. Revenue bonds issued by the Missouri Board of Public Buildings or Department of Natural Resources.
 - c. Revenue bonds of the Missouri Housing Development Commission, Missouri Health and Education Facilities Authority, Missouri Higher Education Loan Authority, Missouri Environmental Improvement and Energy Resources Authority, Missouri Agricultural and Small Business Development Authority, Missouri Industrial Development Board, or State-owned educational institutions.

- d. Certificates of Participation issued by the Missouri Board of Public Buildings or Public Fund Commissioners.
3. Bonds or certificates of participation with an investment grade long-term rating from one of the NRSRO's issued by any of the following agencies:
 - a. Any city in this state having a population of not less than two thousand
 - b. Any county of this state
 - c. Any school district situated in this state
 - d. Any special road district in this state
 - e. Bonds of any political subdivision established under the provision of Article VI, Section 30 of the Constitution of Missouri (City and County of St. Louis)
 - f. Any of the fifty states within the United States of America
 4. Debt securities guaranteed by the United States or its agencies or instrumentalities, as follows:
 - a. Debt securities of the Federal Farm Credit System
 - b. Debt securities of the Federal Home Loan Banks
 - c. Debt securities of the Federal National Mortgage Association ("Fannie Mae")
 - d. Debt securities of the Tennessee Valley Authority (TVA)
 - e. Debt securities of the Federal Agricultural Mortgage Corporation ("Farmer Mac")
 - f. Debt securities of the Government National Mortgage Association ("Ginnie Mae").
 - g. Debt securities of the Federal Home Loan Mortgage Corporation ("Freddie Mac")

- h. Guaranteed Loan Pool Certificates of the Small Business Administration (SBA)
- i. Federal Home Administration insured notes (CBOs).
- j. Public housing notes and bonds (“project notes and bonds”) issued by public housing agencies, guaranteed as to the payment of principal and interest by the government of the United States or any agency or instrumentality thereof.
- k. Debt securities of the Resolution Funding Corporation (REFCORP).

Collateralization margins for pass-through mortgage-backed securities, SBA pool certificates, and collateralized mortgage obligations shall differ from debentures issued by such agencies. The only type of Collateralized Mortgage Obligations (CMO) that the Treasurer’s Office will accept are Exchangeable (EXCH), Floaters (FLT), Mandatory Redemption (MR), Nonaccelerating Security (NAS), Overcollateralized (OC), Planned Amortization (PAC), Prepayment Penalty (PIP), Pass Through (PT), Scheduled Pay (SCH), Semi-annual Pay (SEMI), and Sequential Pay (SEQ) classes. Furthermore, Collateralized Mortgage Obligations must have a weighted average life not to exceed five years and pass the FFIEC High Risk Stress Test. No Strips, Z bonds, Subordinated or Support Bonds, Mortgage Derivatives or Zeros are acceptable.

- 5. Tax anticipation notes issued by any county of class one in Missouri with an investment grade short-term rating from one of the Nationally Recognized Statistical Ratings Organizations (NRSRO’s)
- 6. Surety bonds issued by an insurance company licensed under the laws of the State of Missouri whose claims-paying ability is rated in the highest category by Duff & Phelps, A.M. Best, Standard & Poor’s, or Moody’s. The face amount of such surety bond shall be at least equal to the portion of the deposit to be secured by the surety bond.
- 7. Irrevocable standby Letter of Credit issued by a Federal Home Loan Bank.
- 8. Bonds or certificates of participation issued by local government agencies within the fifty states, provided such instruments are rated in one of the four highest rating categories (investment grade) by at least one NRSRO.

9. Brokered or negotiable certificates of deposit that are fully insured either by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Share Insurance Fund.

The State Treasurer shall determine the collateralization margin (or “haircut”) for each security type listed above, which may change from time to time subject to market conditions and other factors, but in no event shall be greater than the maximum limits allowed by law. The current collateralization requirements by security type are provided on Attachment “A”.

The total market value of collateral must be equal to or greater than the collateralization margin set by the State Treasurer of the total amount of state time deposits (including accrued interest to maturity) plus demand deposits with the depository, less the amount, if any, which is insured by the Federal Deposit Insurance Corporation, or the National Credit Union Share Insurance Fund. All securities pledged as collateral by the depository will be held by the Missouri State Treasurer, in a segregated account. All collateral pledged must be delivered in bearer form, book-entry form, or in the case of fully registered certificates, placed into the nominee name of the custodian.

ATTACHMENT “A”
STATE OF MISSOURI OFFICE OF THE
STATE TREASURER
COLLATERALIZATION
REQUIREMENTS FOR STATE
DEPOSITS

No.	Security	Collateralization Margin (“Haircut”)
1.	United States Treasuries	102%
2.	State of Missouri Bonds/Debt	102%
3.	Local/State Debt	
	a. Any city in this state having a population of not less than two thousand	102%
	b. Any county of this state	102%
	c. Any school district situated in this state	102%
	d. Any special road district in this state	102%
	e. Bonds and COP’s of any political subdivision established under the provision of Article VI, Section 30 of the Constitution of Missouri (City and County of St. Louis)	102%
	f. Any of the fifty states within the United States of America	102%
4.	U.S. Agency Securities	
	a. Agency Debentures	102%
	b. SBA Loan Pools	105%
	c. Agency Mortgage-Backed Securities	105%

	d. Agency CMO's (The following are the only acceptable classes: EXCH, FLT, MR, NAS,OC, PAC, PIP,PT, SCH, SEMI, SEQ)	105%
5.	Tax anticipation notes issued by any county of class one in Missouri	102%
6.	Surety bonds	100%
7.	FHLB Letter of Credit	100%
8.	Out-of-state Municipal Bonds/ COP's	102%
9.	Fully insured Brokered Certificates of Deposit	107%

See the State of Missouri's Acceptable Collateral Policy for a more complete description of the above securities. The above collateralization requirements may change from time to time based on market conditions and other factors, but in no event shall be greater than the maximum limits allowed by law.

This guide is provided to public fund investment officers as a resource from Missouri State Treasurer Scott Fitzpatrick’s office. Should you have any questions about the guide or the content within, please contact us at investmentguide@treasurer.mo.gov.

You may access this guide online at [treasurer.mo.gov/content/for- local-governments](https://treasurer.mo.gov/content/for-local-governments) and there you can order additional print copies should you need them.

For more resources from Treasurer Fitzpatrick’s office, visit treasurer.mo.gov, follow his office on Twitter, [@MOTreasurer](https://twitter.com/MOTreasurer), or like his office on Facebook, [Facebook.com/MOTreasurer](https://facebook.com/MOTreasurer).



SCOTT FITZPATRICK

MISSOURI STATE TREASURER

STATE CAPITOL – JEFFERSON CITY

P.O. BOX 210

JEFFERSON CITY, MO 65102

(573) 751-2411

FAX (573) 751-9443

RELAY MO/DEAF TTY(800) 735-2966

WWW.TREASURER.MO.GOV